

Applicant(s): Dagnachew Birru  
Serial No.: 09/812,437  
Filed: March 20, 2001  
For: A LOW-COST HIGH-SPEED MULTIPLIER/ACCUMULATOR UNIT FOR DECISION FEEDBACK  
EQUALIZERS  
Art Unit: 2637  
Examiner: Goshtasbi, Jamsid

Attorney Docket No.: US010069

**IN THE DRAWINGS:**

Please amend the drawings as indicated below:

*Please replace the sheet 2 of the drawings comprising Fig. 3 with the replacement sheet 2 provided herewith.*

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### **REMARKS/ARGUMENTS**

Reconsideration of the present application in view of the foregoing amendments and the following remarks is respectfully requested. Claims 1-19 are pending in the present application with claims 4-5, 12, and 17-18 being amended hereby. No new matter has been added by such amendments as support for the changes can be found in the application as originally filed.

The Office Action (1) found allowable subject matter with respect to claims 12-15, 17 and 18; (2) objected to the drawings under 37 C.F.R. 1.83(a); (3) objected to claims 12, 17 and 18 for various informalities, (4) rejected claims 1-11 and 16 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description and/or enablement requirements, and (5) rejected claims 1-11 and 19 under 35 U.S.C. 112, second paragraph, as failing to particularly point out and distinctly claim the invention.

With respect to item (1) identified above, Applicant respectfully expresses appreciation to the Examiner for the finding of allowable subject matter with respect to claims 12-15, 17 and 18.

With respect to item (2) identified above, Applicant respectfully submits that revised Fig. 3 as provided herewith via Replacement Sheet, effectively traverses that stated objection to the drawings under 37 C.F.R. 1.83(a) and thus respectfully requests reconsideration and withdrawal of such objection to the drawings.

Regarding item (3) identified above, Applicant respectfully submits that present claims 12, 17 and 18 effectively traverse the stated objections thereto and thus respectfully requests reconsideration and withdrawal of all such objections.

Regarding item (4) identified above, Applicant respectfully submits that present claims 1-11 and 16 effectively traverse the stated 112 first paragraph rejection thereof and that such claims are in condition for allowance.

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First, with respect to claims 1-11, Applicant respectfully notes that although the original disclosure may certainly encompass the Examiner's interpretation relative to certain of the disclosed circuits (e.g., the second sub-multiplication circuit), the original disclosure, by way of an exemplary embodiment, clearly discloses/suggests a sub-multiplication circuit (e.g., 60) comprising AND gates (e.g., 64, 66) each for simultaneously receiving respective output bits of XOR gates (e.g., 54, 56). (see, p.8, lns.1-3, and Fig.3). Accordingly, Applicant respectfully requests reconsideration and withdrawal of the stated rejection of claims 1-11.

Next, with particular respect to claim 11, Applicant respectfully notes that an adequate written description under the first paragraph of 35 U.S.C. 112 "does not require literal support for the claimed invention", but rather, "it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an appellant had possession of the concept of what is claimed." (see, *Ex parte Parks*, 30 USPQ 2d 1234, 1236-37 (B.P.A.I. 1993)). Thus, notwithstanding the suggestion via the Action, that the original disclosure does not literally describe a first discrete digital level value as being an error signal, Applicant respectfully submits that the original disclosure was/is sufficient to convey to one of ordinary skill in the art that Applicant had possession of the concept of associating a discrete level value and an error signal. (see, p.2, lns.10-13, and Fig. 1 in combination with Fig.3 and associated text of specification). Further, Applicant also notes that the claims as filed are part of the specification, and may provide or contribute to compliance with §112. (see, *Hyatt v. Boone*, 47 USPQ 2d 1128, 1130 (Fed. Cir. 1998), *cert. denied*, 1999 U.S. LEXIS 1067 (U.S. Feb. 22, 1999)).

With further regard to claim 11, Applicant respectfully also notes that the specification need only be reasonable with respect to the art involved, it need not inform the layman nor disclose what the skilled already possess. (see, *General Electric Co. v. Brenner*, 159 USPQ 335, 337 (D.C. Cir. 1968)). Accordingly, Applicant respectfully submits that as the original disclosure (e.g., p.2, lns.10-13, and Fig. 1 in combination with Fig. 3 and associated text of specification) is sufficient to enable those skilled in the art, in view of that which is known, to practice the claimed invention, the specification need not disclose more. Therefore, Applicant respectfully requests reconsideration and withdrawal of the stated rejection of claim 11.

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Regarding claim 16, Applicant respectfully notes that the original disclosure, by way of an exemplary embodiment, clearly discloses/suggests a sub-multiplier circuit that can be implemented as a two-input multiplexor *or shift circuit for receiving output of an AND gate and effecting a 4x or 8x multiplication to the output by shifting bits depending upon a value of control signal.* (see, p.9, lns.5-8, and Fig.3). Thus, as the original disclosure is clearly sufficient to enable those skilled in the art to practice the claimed invention, Applicant respectfully submits that the original disclosure was/is adequate. Accordingly, reconsideration and withdrawal of the stated rejection of claim 16 is respectfully requested.

Finally, regarding item (5) above, it is respectfully submitted, in view of the foregoing amendments/remarks, that present claims 1-11 and 19 effectively traverse the stated rejection thereof. Accordingly, reconsideration and withdrawal of such rejection is earnestly solicited.

In sum, it is respectfully submitted that the all of the present claims are clearly patentable over the references made of record in the present application and that this application is in condition for allowance. Accordingly, reconsideration and withdrawal of all objections/rejections relating to the drawings, specification and claims of the present application, are respectfully requested.

Respectfully submitted,



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